REMARKS

A substitute application is submitted to address the concerns expressed by the Examiner in the Office Action.

Applicant does point out that no petiole length or description of the calyx has been made as applicant believes that the remaining described properties of the plant adequately describe it and distinguish it over related plants.

The comment at H. in the paragraph bridging pages 6 and 7 of the Office Action is noted. Applicant informs the Examiner that the peduncle length values in the application are correct. The umbels are compact in pot mums meaning that there is hardly any difference in peduncle length near the top and the bottom of the plant. The peduncles of pot mums are shorter in length than the peduncles in spray mums.

In reply to the requirement for information under 37 CFR 1.105, applicant informs the Examiner that the first sale of cutting occurred in December 1999.

Reconsideration of the application is earnestly solicited.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.

December 31, 2002

Date

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Sub spec + claims OK to enter 3/2/03 AMC

Chrysanthemum plant named 'Etna'

BACKGROUND OF THE INVENTION

'Etna' is a product of a breeding-program that had the objective of creating new chrysanthemum cultivars with a anemone type flower, a 7 week response and a medium plant height. The new plant of the present invention comprises a new and distinct cultivar of Chrysanthemum plant. 'Etna' is a seedling from a cross in a breeding program maintained under the control of inventor. The female and male parents are both unknown, originating from mixed populations of female and male parents. The new and distinct cultivar was discovered and selected as a flowering plant within the progeny of the stated cross by Rob Noodelijk in a controlled environment (greenhouse) in Rijsenhout, Holland in August, 1998. The first act of asexual reproduction of 'Etna' was accomplished when vegetative cuttings were taken from the initial selection in October, 1998 in a controlled environment in Rijsenhout, Holland.

SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of chrysanthemum bearing small sized blooms with pink ray-florets and a darker pink cushion center.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention of a new and distinct variety of chrysanthemum is shown in the accompanying drawings, the color being as nearly true as possible with color photographs of this type.

Fig. 1 shows a plant of the cultivar in full bloom.

Fig. 2 shows the various stages of bloom of the new cultivar.

Fig. 3 shows the foliage of the new cultivar.

DESCRIPTION OF THE INVENTION

This new variety of chrysanthemum is of the botanical classification Chrysanthemum morifolium. The observations and measurements were gathered from plants grown in a greenhouse in Rijsenhout, Holland in

a photo-periodic controlled crop under conditions generally used in commercial practice. The greenhouse temperatures during this crop were at day-time between 18°C and 25°C and at night 20°C. The photo-periodic response time in this crop was 52 days after an average of eight long days. After this long day period to flowering, growth retardants were applied 6 times in an average dose of 1.5 gram/liter water. No tests were done on disease or insect resistance or susceptibility. This new variety produces small sized blooms with pink ray-florets and purple disc-florets blooming on the plant for 5 weeks. This new variety of chrysanthemum has been found to retain its distinctive characteristics throughout successive propagations; however, the phenotype may vary significantly with variations in environment such as light intensity and temperature. To show the phenotype as described, 'Etna' can be planted without assimilation lightning (high pressure sodium lamps) between week 50 and week 40 of the next year under greenhouse conditions in Holland. With assimilation lightning (minimum level 2500 lux) it can be planted year round under greenhouse conditions in Holland.

From the cultivars known to inventor the most similar existing cultivar in comparison to 'Etna' is 'Pixie Time' (unpatented). Both 'Etna' and 'Pixie Time' have a bi-color anemone type flower. When 'Pixie Time' and 'Etna' are being compared the following differences are noticed: The differences of 'Pixie Time' and 'Etna' are (1) Flower color. The bi-color effect of 'Etna' is stronger. (2) Vigor. Etna is more vigorous. (3) Plant habit. The width of 'Etna' is larger.

The following is a description of the plant and characteristics that distinguish 'Etna' as a new and distinct variety.

The color designations are taken from the plant itself. Accordingly, any discrepancies between the color designations and the colors depicted in the photographs are due to photographic tolerances. The color chart used in this description is: The Royal Horticultural Society Colour Chart, 1995 edition.

Table 1: Botanical Description of

CULTIVAR 'Etna'

Bud	
Size	Small;cross-section 0.8 cm, height 1.2 cm
Outside Color	Red-purple 66 D
Involucral bracts	2 rows, length 7 mm, width 3 mm
Involucral bracts among disc-florets	Not present
Involucral bracts color	Green 143 C
Bloom	
Type	Anemone
Height	Medium
Size	Small
Fully Expanded	4.2 - 4.7 cm.
Number of blooms per branch	Approx. 3-5 blooms per branch
Performance on the plant	5 weeks
Seeds	Not produced
Fragrance	Typical chrysanthemum

Color

Center of the flower (disc-florets)	Immature a dot of red-purple 59 A, in the center red-purple 60 C, the outer half red-purple 62 C Mature a dot of red-purple 59 A, red-purple 60 C, the outer half red-purple 62 C
Color of upper surface of the majority of the ray-florets	Purple 75 D
Color of the lower surface of the majority of the ray-florets	Purple 75 D to 75 B
Tonality from Distance	A pot mum with purple and white flowers and a purple center
Discoloration to color	The center partly to red-purple 62 C, the petals do not fade.

Ray florets

Texture	Upper and under side smooth
Number	20-22
Cross-section	Concave

Longitudinal axis of majority	Straight
Length of corolla tube	Short
Ray-floret length	1.6 - 1.8 cm.
Ray-floret width	0.8 cm.
Ratio length / width	Very low
Shape of tip	Pointed

Disc florets

Disc diameter	Anemone center; 3.0 cm.
Distribution of disc florets	Numerous and clearly visible at all stages of flowering.
Shape	Petaloid
Color	Red-purple 62 C, tipped with red-purple 60C
Receptacle shape	Domed raised

Reproductive Organs

Stamen	No stamen
Pollen	No pollen
Styles (present in both ray and disc florets)	Yellow -green 144 A, very thin

Sub A1

Style Length	3 mm.
Stigma color	Yellow-Green 144 A
Stigma Width	1 mm.
Ovaries	Enclosed in calyx

Plant

Form	A pot mum meant for indoor use
Growth habit	Spreading
Growth rate	Rapid
Height	27.0 - 28.0 cm.
Width	27.0 cm.
Stem Color	Green 143 C
Stem Strength	Strong
Stem Brittleness	Absent
Stem Anthocyanin Coloration	Absent
Length of lateral branch	From top to bottom 12.0 - 14.0 cm
Lateral branch color	Yellow-Green 144 A
Lateral branch, attachment	Strong
Branching (average number of lateral branches)	Prolific with 5-6 breaks after pinching
Peduncle length	3.5 - 4.0 cm.
Peduncle color	Yellow-Green 144 A

Flowering Response(photo-periodic controlled crop, not natural season)	52 Days

Foliage

Color	Upper side green 137 A Under side green 138 A
Size	small; length 5.5 cm, width 4.5 cm
Quantity (number per lateral branch)	7-8
Shape	Ovulate
Texture upper side	Fleshy
Texture under side	Pubescent
Ribs and veins upper side	Ribs and veins well developed
Ribs and Veins upper side	Ribs and veins well developed
Venation arrangement	Palmate
Shape of the margin	Crenated
Shape of Base of Sinus Between Lateral Lobes	Round
Margin of Sinus Between Lateral Lobes	Parallel

Shape of Base	**Acute**
Apex	**Mucronate**

Differences with the comparison varieties

	'ETNA'	'PIXIE TIME'
Color of the center of the flower immature	a dot of red-purple 59 A, in the center red-purple 60 C, the outer half red-purple 62 C	A dot of red-purple 61 A, in the center red-purple 61 C, the outer half red-purple 61 D
Growth rate	Moderate	Slow
Width	26.0 cm.	24.0 cm.

I CLAIM:

A new and distinct variety of chrysanthemum plant as described and illustrated.

ABSTRACT

A Chrysanthemum plant named 'Etna' characterized by its small sized blooms with pink ray-florets and a darker pink cushion center.